



End of Result Set

Generate Collection

L3: Entry 1 of 1

File: USPT

May 18, 1999

US-PAT-NO: 5905987

DOCUMENT-IDENTIFIER: US 5905985 A

TITLE: Relational database modifications based on multi-dimensional database

modifications

DATE-ISSUED: May 18, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Malloy; William Earl Santa Clara CA N/A N/A Tomlyn; Craig Reginald San Jose CA N/A N/A

US-CL-CURRENT: 707/100; 707/101, 707/102

ABSTRACT:

A method, apparatus, and article of manufacture for using a relational database management system to support on-line analytical processing (OLAP) systems. A relational schema is defined from a multi-dimensional database definition. The multi-dimensional database definition has one or more dimensions having one or more members. The relational schema includes a fact table and related dimension tables. The fact table has a dimension column for all but one of the dimensions of the multi-dimensional database and a value column for each member of the remaining dimension. The fact table has one or more rows that contain values corresponding to the intersection of the members identified by the dimension columns and the members associated with the value columns. Each dimension table has a row for each member of a dimension. Each row of each dimension table includes a multi-dimensional member identifier and a relational member identifier. A relational database is created based on the defined relational schema. Rows are accessed from the relational database using the multi-dimensional member identifiers by joining the dimension tables to the fact table through the relational member identifiers.

18 Claims, 5 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 5

101 09/073,748

9/28/00 10:44 AM

anna		waa WE	ST			ununun.
		Help Logo	ut In	terrupt		
Ma	ain Menu Search	Form Posting Counts S	how S Numb	ers Edit S N	umbers Prefere	nces
	***************************************				***************************************	•
		Search I	Results -			
		Terms		Documents		
		l1 and "star schema" an	d columns	1		
atabase:	US Patents Full JPO Abstracts De EPO Abstracts De Derwent World Permisser Die BM Technical	atabase atabase				
Refine Se		d "star schema" and	columns		Clear	
***************************************		Search	History			

Today's Date: 9/28/2000

DB Name	<u>Query</u>	Hit Count	Set Name
USPT	11 and "star schema" and columns	1	<u>L3</u>
USPT	11 and "star schema"	1	<u>L2</u>
USPT	database and (definition same schema) and tables	249	<u>L1</u>

1011 09/073,748